AMENDMENTS

In the Claims:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Previously Presented) An architecture for an automation system, the automation system used to remotely control and monitor power consuming devices drawing power from a power line in a building, the architecture comprising:

a look-up service maintaining a database of (1) the power consuming devices including their attributes of device type and physical location, and (2) device objects

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corresponding to the power consuming devices including a name for each device object mapped to at least one address;

a store managing information for refreshing the power consuming devices and the device objects;

a publication/subscription eventing component enabling subscriptions to events related to changes in the refresh information managed by the store; and,

a power line monitor detecting super-imposed transmissions from the power consuming devices on the power line, which signal problems with the power consuming devices.

12.   (Previously Presented) The architecture of claim 11, wherein the power line monitor uses pattern-based detection for detecting unacceptable power line activity.

13.   (Previously Presented) The architecture of claim 12, wherein the power line monitor matches power line patterns against unacceptable power line patterns stored in a pattern database.

14.   (Previously Presented) The architecture of claim 11, wherein the power line monitor uses model-based detection for detecting acceptable power line activity.

15.   (Previously Presented) The architecture of claim 14, wherein the power line monitor tests power line patterns against a pattern model of acceptable power line patterns.
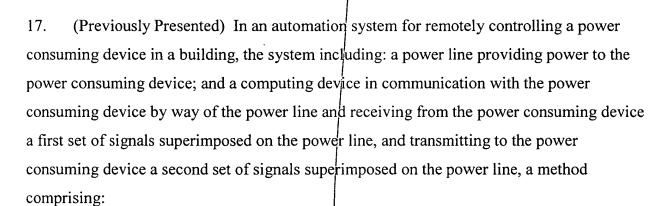
16.   (Previously Presented) A system for detecting device failures in an automation system for remotely controlling a power-consuming device in a building, the system comprising:

a power line providing power to the power consuming device;

a computing device in communication with the power consuming device by way of the power line and receiving from the power consuming device a first set of signals superimposed on the power line, and transmitting to the power consuming device a second set of signals superimposed on the power line; and

a power line monitor that detects a pattern in the first and second sets of superimposed signals and performs a predetermined action when the pattern indicates an anomaly in the automation system.

17.   (Previously Presented) In an automation system for remotely controlling a power consuming device in a building, the system including: a power line providing power to the power consuming device; and a computing device in communication with the power consuming device by way of the power line and receiving from the power consuming device a first set of signals superimposed on the power line, and transmitting to the power consuming device a second set of signals superimposed on the power line, a method comprising:

detecting a pattern in the first and second sets of superimposed signals; and

performing a predetermined action when the pattern indicates an anomaly in the automation system.

18.   (New) The system of claim 16, wherein the power line monitor matches the pattern in the first and second sets of superimposed signals with patterns stored in a database.

19.   (New) The system of claim 16, wherein the power line monitor tests the pattern against a model of acceptable patterns.

20.   (New) The method of claim 17, wherein detecting the pattern in the first and second sets of superimposed signals includes testing the pattern against a model of acceptable power line patterns.

21.   (New) The method of claim 17, wherein detecting the pattern in the first and second sets of superimposed signals includes testing the pattern against unacceptable patterns stored in a database.